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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/939,084	08/24/2001	Robert Ward Carter	16279-14C1	7186

32112 7590 06/05/2002

INTELLECTUAL PROPERTY LAW OFFICE  
1901 S. BASCOM AVENUE, SUITE 660  
CAMPBELL, CA 95008

EXAMINER

MAYO, TARA L

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/939,084

Applicant(s)

CARTER ET AL.

Examiner

Tara L. Mayo

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,14-17,26,30,33,34 and 36-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-72 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,14,16,17,26,30,33,34 and 36-48 is/are rejected.
- 7) ☒ Claim(s) 15,49,50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 24 August 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 24 August 2001 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because all of the references cited therein are not listed on a form PTO-1449. It has been placed in the application file, but all of the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

### *Drawings*

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 24 August 2001 have been approved.

### *Specification*

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be

Art Unit: 3671

directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used

Art Unit: 3671

by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because it refers to purported merits and speculative applications of the invention, and it includes legal phraseology. Correction is required. See MPEP § 608.01(b).

#### *Claim Objections*

6. Claim 30 is rejected to because of the following informalities: minor grammatical errors. On line 5, immediately following "said" and prior to "blade" insert --at least one--. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another

Art Unit: 3671

who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 30 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Lincoln (U.S. Patent No. 6,109,832).

Lincoln '832 shows a mole for use in the trenchless replacement of in-situ pipe, the mole comprising:

a nose portion (33) being engageable to a cable (14);

a tapered body portion (40); and

a replacement pipe engagement portion (60);

said mole further including at least one blade (44);

said tapered body portion acting to initially contact, fracture, and expand the in-situ pipe for the replacement thereof with a length of replacement pipe (25); and

said at least one blade acting to cut pipe engagement devices encountered by said mole after the pipe has been expanded by said tapered body portion;

wherein a threaded bore (43) is formed within said mole, and wherein a mole engagement fixture (30) is fixedly engaged to an end of the cable, said fixture including a threaded end portion (35) that is threadably engageable with said threaded bore.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisk et al. (U.S. Patent No. RE 35,542) in view of Poweram Model 7000.

Art Unit: 3671

Fisk et al. '542 disclose a device for the trenchless replacement of in-situ pipe comprising:

a mole (22);

a length of cable (25), said cable being engageable to said mole;

a cable pulling device (28) being releasably engageable to said cable; and

a cable pulling device mounting frame (40) being releasable engageable to said cable-pulling device (col. 6, lines 53 through 61).

Fisk et al. '542 disclose all of the features of the claimed invention with the exception(s) of:

the cable-pulling device being a post-tensioning ram (PTR).

Poweram Model 7000 discloses a PTR designed for replacing existing utility lines by pulling pipe-splitting and/or -bursting tools through an existing pipe and pulling a new pipe into the same space.

With regard to claim 1, it would have been obvious to one of ordinary skill in the art of pipe laying at the time of invention to modify the device shown by Fisk et al. '542 such that it would include a PTR as a cable pulling device as taught by Poweram Model 7000. The motivation would have been to include a pulling device capable of varying its grip in response to resistance during operation of the same.



Art Unit: 3671

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisk et al. (U.S. Patent No. RE 35,542).

Fisk et al. '542 disclose a device for the trenchless replacement of in-situ pipe comprising:

a mole (22);

a length of cable (25), said cable being engageable to said mole;

a cable pulling device (28) being releasably engageable to said cable; and

a cable-pulling device mounting frame (40) being releasably engageable to said cable-pulling device (col. 6, lines 53 through 61).

Fisk et al. '542 disclose all of the features of the claimed invention with the exception of:

the cable pulling device mounting frame including an annulus member including a cable passage bore formed therethrough and a cable insertion slot formed through portions of said annulus member for the sideways insertion of said cable within said cable passage bore for the sideways insertion of said cable within said cable passage bore.

With regard to claim 14, it would have been obvious to one of ordinary skill in the art of pipe laying at the time of invention to modify the mounting frame of the device shown by Fisk et al. '542 such that it would include a cable insertion slot formed through portions of an

Art Unit: 3671

annulus member. The motivation would have been for ease of installation of the device, as the cable would not have to be "threaded" through the mounting frame.

13. Claims 16, 17, 26, and 36 through 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisk et al. (U.S. Patent No. RE 35,542) in view of Vermeer.

Fisk et al. '542 further disclose:

with regard to claim 44, the cable pulling device being disposed within the receiving pit (col. 6, lines 53 through 61).

Fisk et al. '542 as modified above disclose all of the features of the claimed invention with the exceptions of:

the mounting frame including a reaction plate having an enlarged surface for disbursing a reaction force against a cable pulling force generated by the cable pulling device; and

the annulus member being mountable in relation to the reaction plate such that the reaction plate will disburse cable-pulling forces exerted on the annulus by the cable-pulling device.

Vermeer shows a pipe-bursting device comprising a cable pulling device installed in an excavation for pulling an pipe-bursting tool through an existing pipeline, and further including

Art Unit: 3671

a reaction plate having an enlarged surface positioned between a wall of the excavation and the cable pulling device.

With regard to claim 16, 26, and 36, it would have been obvious to one of ordinary skill in the art of pipe laying at the time of invention to modify the device shown by Fisk et al. '542 such that it would include a reaction plate as taught by Vermeer. The motivation would have been to include a means of resistance to the cable pulling force whereby the cable-pulling device would remain relatively stable.

With regard to claim 17, it would have been obvious to one of ordinary skill in the art of pipe laying at the time of invention to further modify the device shown by Fisk et al. '542 such that the annulus member would be mountable in relation to the reaction plate such that the reaction plate will disburse cable pulling forces exerted on the annulus by the cable pulling device. The motivation would have been to provide continuity between the various components of the device thereby effectively transferring force during use of the same.

With regard to claims 37 through 39, it has been held that a mere duplication of parts does not bear patentable merit. (In re Harza, 124 USPQ 378). As such, Applicants' claimed invention is anticipated by the device shown by Fisk et al. '542 in view of Vermeer and the above statements of obviousness.

With regard to claims 40 through 45, the method steps and associated structural limitations recited therein are considered to inherent to the installation of the device shown by Fisk et al. '542 as modified above by Vermeer and statements of obviousness.

Art Unit: 3671

With regard to claim 45, it would have been well within ordinary level of skill for one in the art to place the frame in the receiving pit along with the cable-pulling device to include a means of support for the device.

14. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lincoln (U.S. Patent No. 6,109,832).

Lincoln '832 shows all of the features of the claimed invention with the exception of: the fixture further including a hex bolt portion integrally formed therewith and provided for the tightening of the threaded portion within the threaded bore.

It would have been obvious to one of ordinary skill in the art of earth boring at the time of invention to modify the device shown by Lincoln '832 such that its body would include a hex bolt portion integrally formed therewith. The motivation would have been to facilitate tightening of the threaded portion within the threaded bore with a wrench or other tool.

15. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisk et al. (U.S. Patent No. Re. 35,542) in view of Vermeer as applied to claim 45 above, and further in view of Poweram Model 7000.

Fisk et al. '542 in view of Vermeer disclose all of the method steps and associated structural limitations of the claimed invention with the exception of:

Art Unit: 3671

the cable-pulling device being a PTR.

Poweram Model 7000 discloses a PTR designed for replacing existing utilities by pulling pipe splitting and/or bursting tools through an old pipe and pulling a new pipe into the same space.

With respect to claim 47, it would have been obvious to one of ordinary skill in the art of pipe laying at the time of invention to modify the device shown by Fisk et al. '542 as modified above by Vermeer such that it would include a PTR for a cable pulling device as taught by Poweram Model 7000. The motivation would have been to include a pulling device capable of varying its grip in response to resistance during operation of the same.

16. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisk et al. (U.S. Patent No. RE 35,542) in view of Post Tension/Stressing Jacks (Exhibit CE).

Fisk et al. '542 disclose a device for the trenchless replacement of in situ pipe comprising:

a mole (22);

a length of cable (25), said cable being engageable to said mole; and

means for pulling said cable (28) in a plurality of cable pulling strokes (col. 5, lines 25 through 34).

Fisk et al. '542 disclose all of the features of the claimed invention with the exception(s) of:

means for releasably holding the cable between pulling strokes.

Post Tension/Stressing Jacks shows collets for releasably gripping cable during tensioning.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the device shown by Fisk et al. '542 such that it would include releasable cable grippers as shown by Post Tension/Stressing Jacks to maintain the position of the cable during the pulling operation.

#### *Double Patenting*

17. Claims 1, 2, 6, 7, 14, 16, 17, 30, 33, 36, 40, 46, and 47 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1(again), 2, 3, 7, 8, 9, and each claim 21 through 23, 23 (again), 8 (again), 8 (again), 8 (again), 8 (again), 24, 24 (again), and 25 of U.S. Patent No. 6,305,880.

With regard to claims 1 and 2, although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of the dependent claims are recited in combination in claim 1 of the patented reference.

With respect to claims 37 through 39, it has been held that a mere duplication of parts does not bear patentable merit. (In re Harza, 124 USPQ 378). As such, Applicants' claimed

Art Unit: 3671

invention is anticipated by the device shown by Fisk et al. '542 in view of Vermeer and the above statements of obviousness.

*Allowable Subject Matter*

18. Claims 51 through 72 are allowed.

19. Claim 15, 49, and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

*Response to Arguments*

21. Applicant's arguments filed 24 August 2001 have been fully considered but they are not persuasive.

With regard to Applicants' arguments regarding claim 30, it is the Examiner's position that the point of expansion is the same as the point of fracture as seen in Figure 19. As such, the device shown by Lincoln'832 anticipates the claimed limitation.

Art Unit: 3671

With regard to claim 33, Applicant's arguments merely amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

With regard to Applicants' statements on page 19 of the response purporting that no motivation exists to modify the rod pulling/pushing device shown by Poweram 7000 such that it would be capable of use with continuous cable, the Examiner contends that Fisk et al. '542 implicitly teach modification in col. 5, lines 25 through 30.

With regard to Applicants' discussion of the Vermeer reference on page 19 of the response, the Examiner notes that claim 1 of the instant application is not directed to the position of the cable puller in or out of the pit. As such, any discussion pertaining to the same is not relevant to the above maintained rejection. Furthermore, the reference is relied upon solely for the teaching of a reaction plate capable of disbursing cable pulling forces and not for the positioning of the cable puller.

With regard to Applicants' statements on page 19 purporting that Fisk et al. '542 provide scant details of the conversion of the Poweram rod pusher to a reciprocating cable puller, the Examiner notes that claims of the instant application do not require any details of conversion and broadly recite a post tensioning ram (PTR).

With regard to Applicants' succinct statement of the various deficiencies of Fisk et al. '542 as set forth on page 19, the Examiner directs Applicants to the above Office action wherein each deficiency is addressed wither with a statement of obviousness or an indication of allowability.



With regard to Applicants discussion of Exhibit CE, the Examiner notes the same but asserts that it is impertinent to the above-maintained rejection of the claims because the Examiner has not relied upon the reference.

With regard to Applicants' statements addressing the rejection of claims 37 through 39, it has been held that a mere duplication of parts does not bear patentable merit. (In re Harza, 124 USPQ 378).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the U-shaped opening, and the sideways-mountable frame) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### *Conclusion*

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Roessler (U.S. Patent No. 5,211,509) and Handford (U.S. Patent No. 5,328,297) show device including reaction plates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

Art Unit: 3671

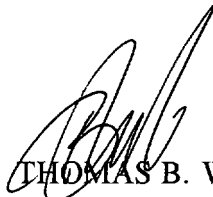
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-3795 for regular communications and 703-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.



TLM

3 June 2002



THOMAS B. WILL  
SUPERVISORY PATENT EXAMINER  
GROUP 3600